

Work Order ID 110394 -1

December-18-13 8:50:12 AM

110394

Rev D S 13/12/24
PRELIMINARY ISSUE

Page 1

Item ID: D4635-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Fwd Ceiling Panel, LH

Start Date: 12/18/13 Start Qty: 2.00

2

Cust Item ID:

Required Date: 12/31/13 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals:

Process Plan: MLS

Date: 13-12-18

Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

DAS
10
9-89

DAS
27
9-89

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D4635

Rev D

Rev D

100

0.00

100

HAND FINISHING THERMOFORMING

Thermoform

Memo

0.00

Thermoforming Machine

Cut Blanks

3

13/12/19

105

0.00

105

Dry Material

HandThermo

Memo

0.00

Hand Finishing Thermoforming

Dry Sheet as per QSI022 KYDEX

Temp: 245°F

Time IN: 700 pm

13/12/18

Time OUT: 700 am

13/12/19

3

13/12/19

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence
<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge		
<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other: _____		

December-18-13 8:50:12 AM

Page 2

Reference:

Approvals:	Process Plan: _____	Date: _____	Tooling: _____	Date: _____	Run Start Stop	*NR1*
	QC: _____	Date: _____	SPC (Y/N): _____	Date: _____		*NR2*

110

110

Thermoform

Thermoforming Machine

THERMOFORMING MACHINE

0.00

0.00

Memo

Thermoform as per Dwg. D4635-1 and Folio FTA147

Dwg. Rev. PDIFolio Rev. D

Visually inspect for proper formation and texture

130

130

Thermoform

Thermoforming Machine

HAND FINISHING THERMOFORMING

0.00

0.00

Memo

Trim to Finished Dimensions

140

140

QC

Quality Control

QC2- Inspect parts off machine FAI/FAIB

0.00

0.00

Memo

2 1 _____

G.
13/12/19
PTO →

1 _____

~~B~~ 13/12/20

x1 _____

G.
13/12/22

DQA:

Date: 14/01/30

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed:

Date: 14/11/27

Work Order update only ☐

Work Order: <u>110394</u>	DISPOSITION Rework <input type="checkbox"/> Scrap <input checked="" type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS					
Part No. <u>D4635-1</u>		Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>		
NCR No. <u>14 3454</u>		Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>		
		Thermoforming <input checked="" type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>		
		Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>			

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data	13/12/19	110	1	Did not form to model.	DAS 27 9-88	Scrap 1 part adjust temperature and re-make.	Wh 13/12/19	13/12/23	DAS 27 9-88
Equip/Tooling					13/12/23				13/12/23
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process	X			R.C New Program first try	S 13/12/24 052012	1 part. (New program).			S 13/12/24
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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Work Order ID 110394

December-18-13 8:50:12 AM

110394

Page 3

Item ID: D4635-1 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Fwd Ceiling Panel, LH
 Start Date: 12/18/13 Start Qty: 2.00 *2* Cust Item ID:
 Required Date: 12/31/13 Req'd Qty: 2.00 *2* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150 *150* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 27 9-89 13/12/23				1			
160 *160* Packaging Packaging	Packaging Memo <i>used on w/o 110506 D4635-141</i>	0.00 0.00							<i>13/12/23</i>
170 *170* QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.00							

RD4397A

DAS
27
9-89

MCJ 14-01-24
Release Durs Rev D 13.12.23

POSITIVE RECALL
 EFFECTIVE 13.12.18 AUTH W
 RELEASED 5 DATE 13/12/24

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence
		<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other

Picklist Print

December-18-13 8:50:16 AM

Page 1

Work Order ID: 110394

110394

Parent Item: D4635-1

D4635-1

Parent Item Name: Fwd Ceiling Panel, LH

Start Date: 12/18/13

Required Date: 12/31/13

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev. A New Issue 12/05/07 DL VERIFIED BY:JLM IPP Rev. B
Dwg. Update 12/11/08 DL IPP Rev. C Dwg Update
13/07/09 DL IPP Rev D Dwg Update, Material
Change 13/12/18 DL

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MLEXS.093-F6006-07		Purchased	No			100	sf	1,838.000	14.9	30			
MI FXS 093-F6006-07										**	30	13/12/23	
GE PLASTICS LEXAN SHEET													

Location

Loc Qty

Loc Code

MAT023

2067.26

114459

229.26

123105

38

124501

1800

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

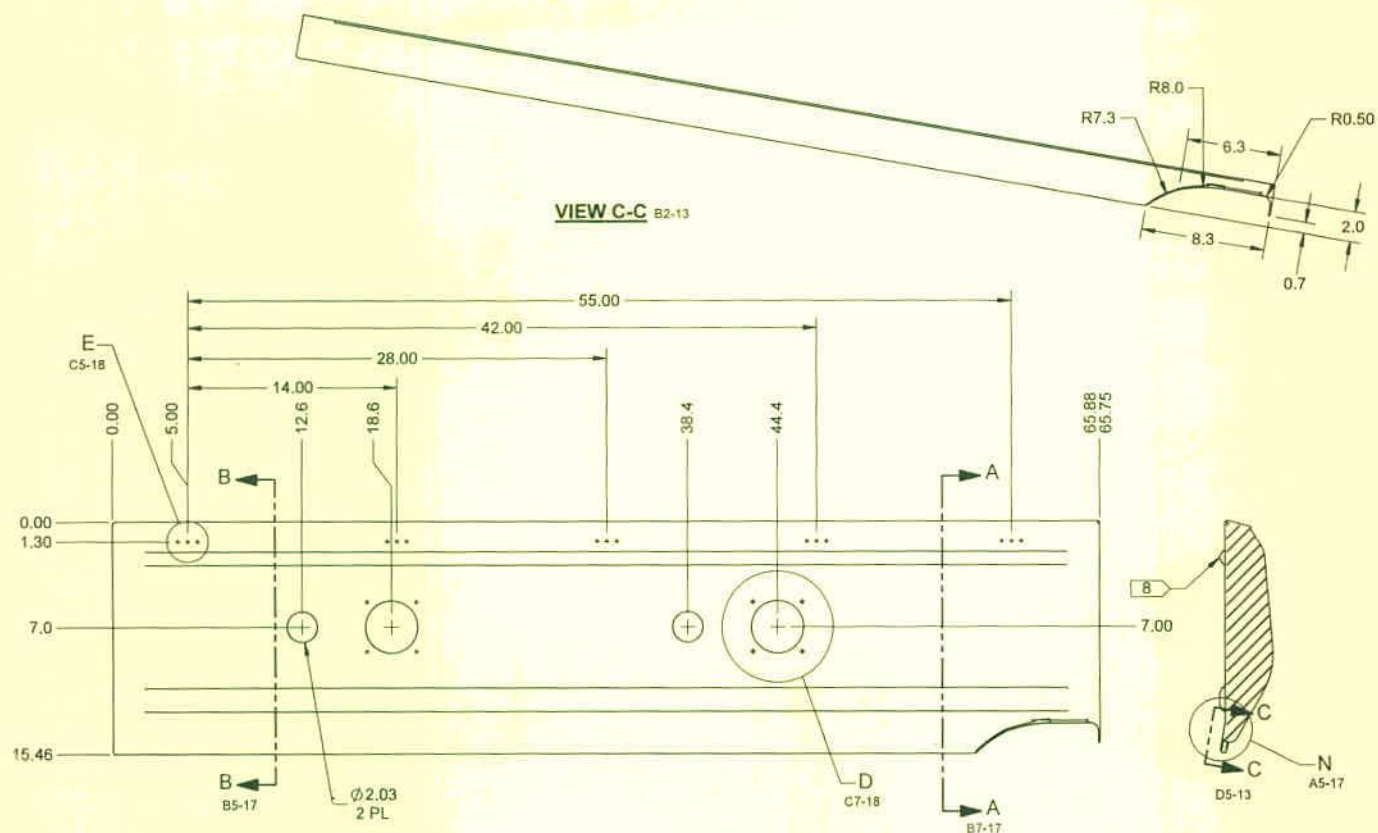
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other _____ _____ _____
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NOTES:

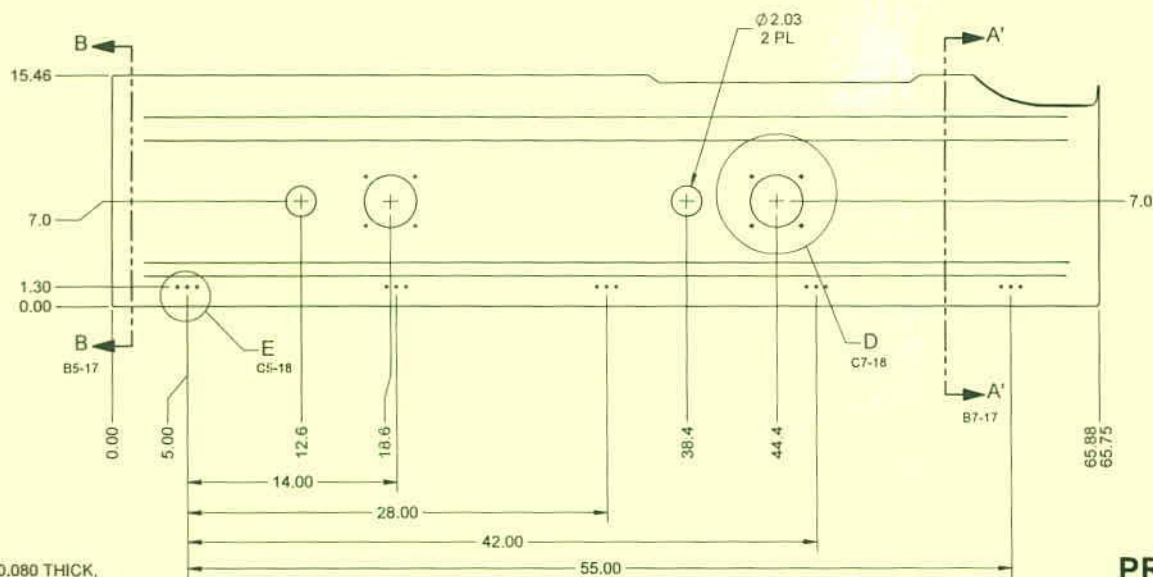
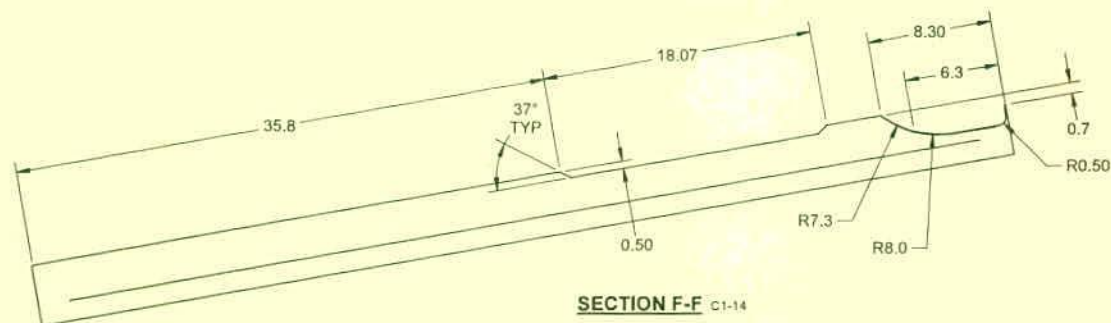
- 1) MATERIAL: KYDEX 6185 SHEET, 0.080 THICK,
P3-VELOUR MATTE, STEEL GRAY #52068
PER DART SPEC MKYD6185S.080-P3-52068
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK: SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 4.29 lbs
- 8) TEXTURE ON THIS SIDE
- 9) TRIM D4635-1 PER TOOL DT9839
- 10) THERMOFORM D4635-1 PER QSI 022 USING DT9847 TOOL
MIN. THICKNESS AFTER FORMING:
SHADE AREA = 0.040
RIDGES/EDGES = 0.060
ELSEWHERE = 0.070

D4635-1 LH, FWD CEILING PANEL

PRELIMINARY ISSUE

13.12.09

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	BC	DRAWING NO.	REV. PD1
MFG. APPR.		D4635	SHEET 13 OF 18
APPROVED		TITLE	SCALE
DE APPR.		OUTBOARD CEILING PANELS NTS	
DATE	13.12.09	COPYRIGHT © 2012 BY DART AEROSPACE LTD	
THIS DOCUMENT IS PRELIMINARY AND NOT FOR CONSTRUCTION. IT IS NOT TO BE USED FOR ANY PURPOSES OR FOR CONSTRUCTION OF ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			



NOTES:

1) MATERIAL: KYDEX 6185 SHEET, 0.080 THICK,
P3-VELOUR MATTE, STEEL GRAY #52068
PER DART SPEC MKYD6185S.080-P3-52068

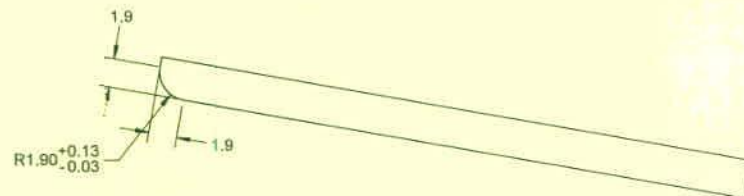
- 2) FINISH: N/A
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 4.28 lbs
 - 8) TEXTURE DN THIS SIDE
 - 9) TRIM D4635-2 PER TOOL DT9840
 - 10) THERMOFORM D4635-2 PER QSI 022 USING DT9847 TOOL
- MIN. THICKNESS AFTER FORMING:
SHADED AREA = 0.040
RIDGES/EDGES = 0.060
ELSEWHERE = 0.070

D4635-2 RH, FWD CEILING PANEL

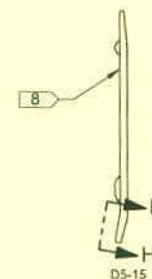
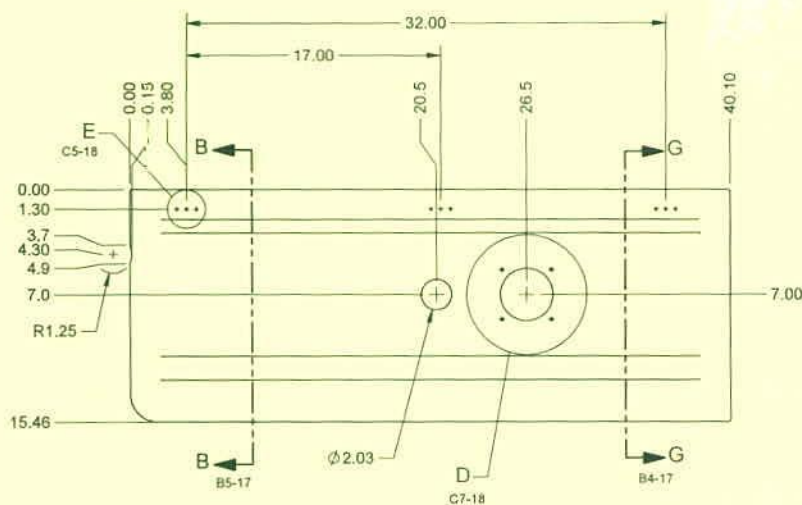
PRELIMINARY ISSUE

13.12.09

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	DL	DRAWING NO.	REV. PD
MFG. APPR.		D4635	SHEET 14 OF 1
APPROVED		TITLE	SCALE
DE APPR.		OUTBOARD CEILING PANELS NTS	
DATE	13.12.09	COPYRIGHT © 2012 BY DART AEROSPACE LTD	
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SECTION H-H 62-15



NOTES:

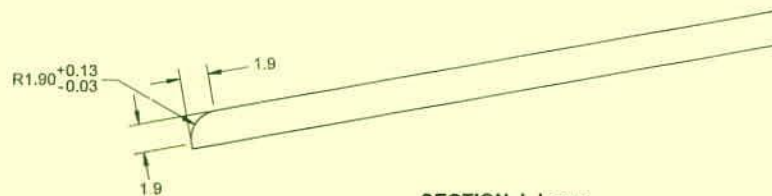
- 1) MATERIAL: KYDEX 6185 SHEET, 0.080 THICK,
P3-VELOUR MATTE, STEEL GRAY #52068
PER DART SPEC MKYD6185S.080-P3-52068
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 2.60 lbs
- 8) TEXTURE ON THIS SIDE
- 9) TRIM D4635-3 PER TOOL DT9841
- 10) THERMOFORM D4635-3 PER QSI 022 USING DT9849 TOOL
MIN. THICKNESS AFTER FORMING:
RIDGES/EDGES = 0.060
ELSEWHERE = 0.070

D4635-3 LH, AFT CEILING PANEL

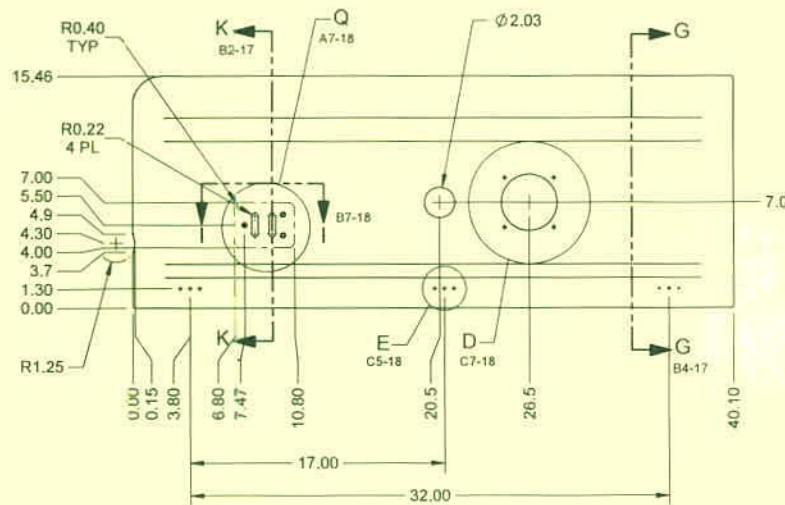
PRELIMINARY ISSUE

13.12.09

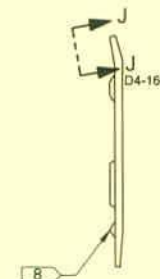
DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	SC	DRAWING NO.	REV. PD1
MFG. APPR.		D4635	SHEET 15 OF 18
APPROVED		TITLE	SCALE
DE APPR.		OUTBOARD CEILING PANELS	NTS
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SECTION J-J C2-16



D4635-4 RH, AFT CEILING PANEL



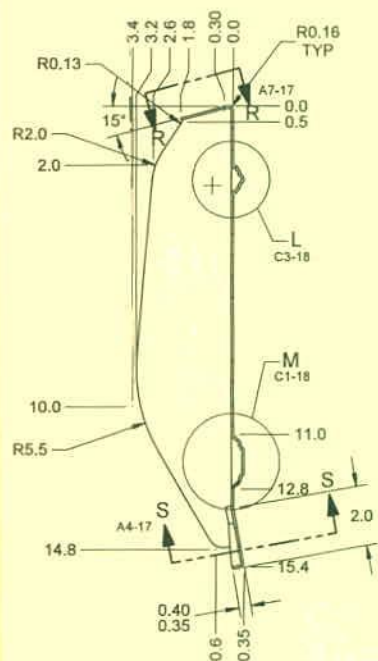
NOTES:

- 1) MATERIAL: KYDEX 6185 SHEET, 0.080 THICK,
P3-VELOUR MATTE, STEEL GRAY #52068
PER DART SPEC MKYD6185S.080-P3-52068
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 2.60 lbs
- 8) TEXTURE ON THIS SIDE
- 9) TRIM D4635-4 PER TOOL DT9842
- 10) THERMOFORM D4635-4 PER QSI 022 USING DT9850 TOOL
MIN. THICKNESS AFTER FORMING:
RIDGES/EDGES = 0.060
E.S.EWHERE = 0.070

PRELIMINARY ISSUE

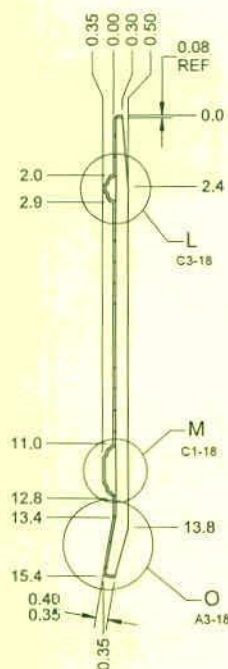
13.12.09

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	DL	DRAWING NO. D4635	REV. PD*
MFG. APPR.			SHEET 16 OF 11
APPROVED		TITLE	SCALE
DE APPR.		OUTBOARD CEILING PANELS	NTS
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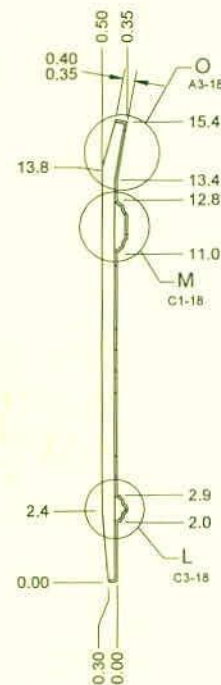
SECTION A-A
SECTION A'-A' OPPOSITE
SCALE 2X

B3-13
B3-14



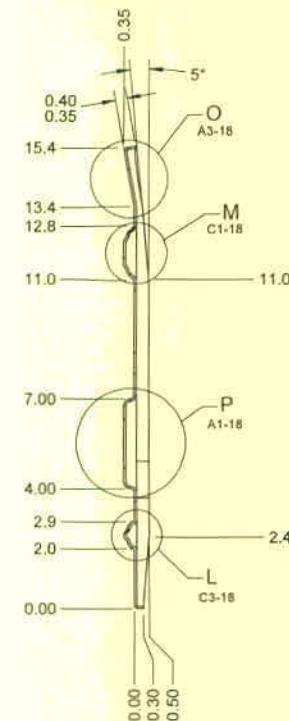
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SCALE 2X

B7-13
B7-14



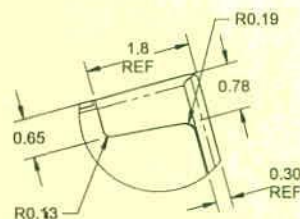
SECTION G-G
SCALE 2X

B4-15
B4-16



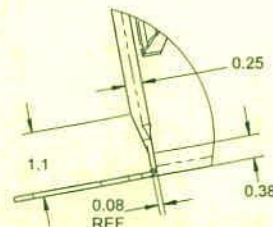
SECTION K-K
SCALE 2X

C6-16



AUXILIARY VIEW R-R
SECTION R'-R' OPPOSITE
SCALE 2X

D7-17



AUXILIARY VIEW S-S
SECTION S'-S' OPPOSITE
SCALE 2X

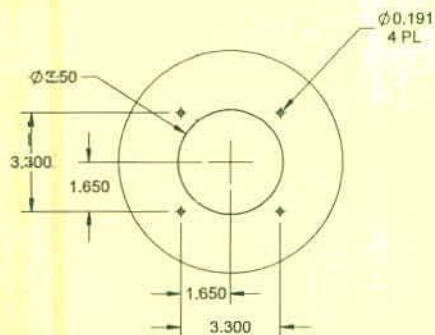
B7-17

PRELIMINARY ISSUE

13.12.09

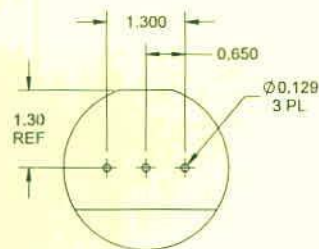
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DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	SC	DRAWING NO.	REV. PD1
MFG. APPR.		D4635	SHEET 17 OF 18
APPROVED		TITLE	SCALE
DE APPR.		OUTBOARD CEILING PANELS	NTS
DATE	13.12.09	COPYRIGHT © 2012 BY DART AEROSPACE LTD	
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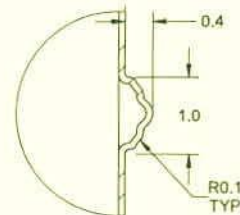
DETAIL D
SCALE 2X

B4-13
B3-14
B5-15
B5-16



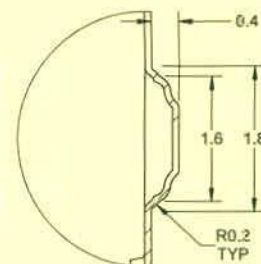
DETAIL E
SCALE 4X

C7-13
B6-14
C8-15
B5-16



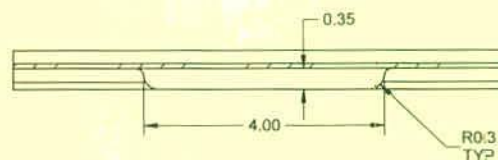
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SCALE 1.5X

B2-17
B4-17
C5-17
C7-17



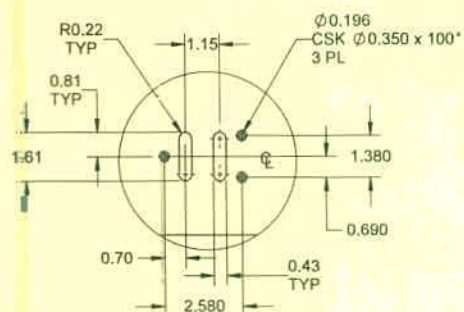
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SCALE 1.5X

C2-17
C3-17
C5-17
C7-17



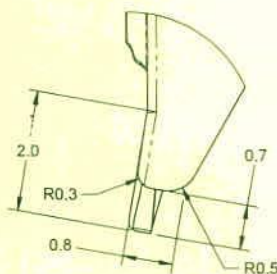
SECTION I-I
SCALE 4X

B5-16



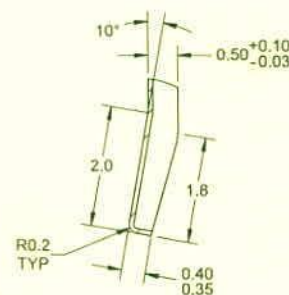
DETAIL Q
SCALE 2X

C5-16



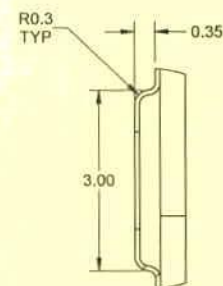
DETAIL N
SCALE 2X

B2-13



DETAIL O
SCALE 2X

D2-17
D3-17
B5-17



DETAIL P
SCALE 4X

C2-17

PRELIMINARY ISSUE

13.12.09

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	SC	DRAWING NO.	REV. PD
MFG. APPR.		D4635	SHEET 18 OF 18
APPROVED		TITLE	SCALE
DE APPR.		OUTBOARD CEILING PANELS	NTS
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DART AEROSPACE LTD		Work Order: 110394
Description: PANEL FWD LH	Part Number: D4635-1	
Inspection Dwg: D4635 Rev: P01	Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST
THERMOFORMING SECTION

Description	Accept	Reject	Method of Inspection	Comments
Inside Radii less than <u>N/A</u>				
Shape Definition	✓			
Texture Retention	✓			
Material imperfections such as bumps, cracks, voids, scratching	✓			

Measured by: OK Date: 13/12/19

TRIMMING SECTION

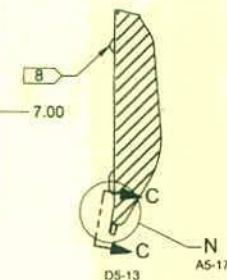
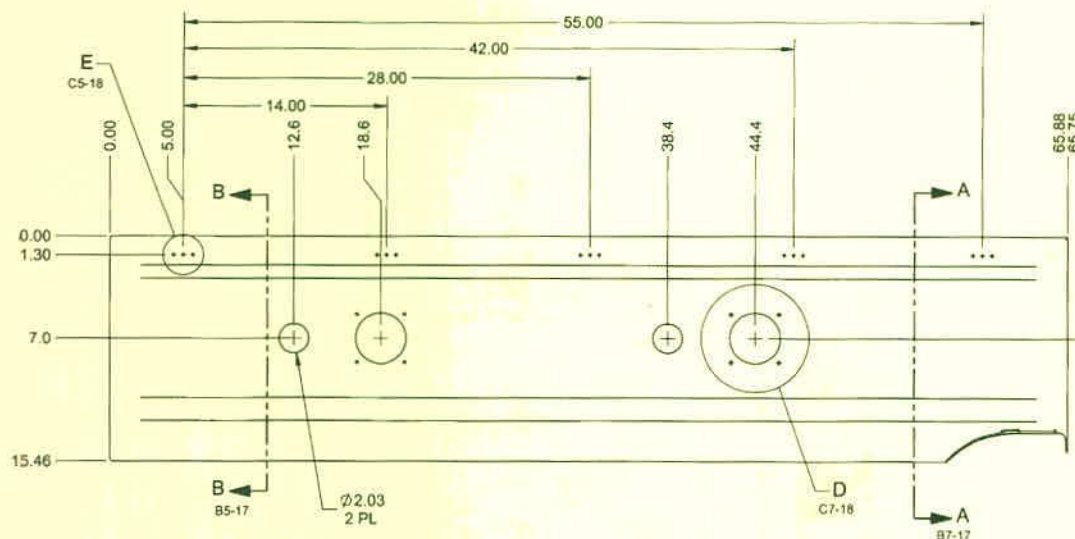
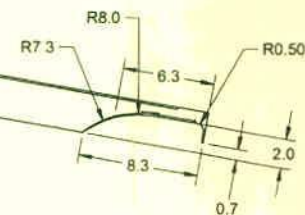
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
65.75"		65.75	✓		TH-05	
15.46"		15.5"	✓		TH-05	
Ø 3.50"		3.56"	✓		DL-02	
Ø 2.03"		2.03"	✓		DL-02	
Ø .191"		.191	✓		DL-02	
Ø .040"		0.41"	✓		DL-02	
Ø .030"		0.33	✓		DL-02	

Measured by: <u>OK</u>	Date: <u>13/12/12</u>
Audited by: <u>27</u> <u>DAS</u>	Date: <u>13/12/13</u>
Preliminary Approval: <u> </u>	Date: <u> </u>

Rev	Date	Change	Revised by	Approved
B	10.04.14	Added preliminary approval	KJ	

10.04.14

VIEW C-C B2-13



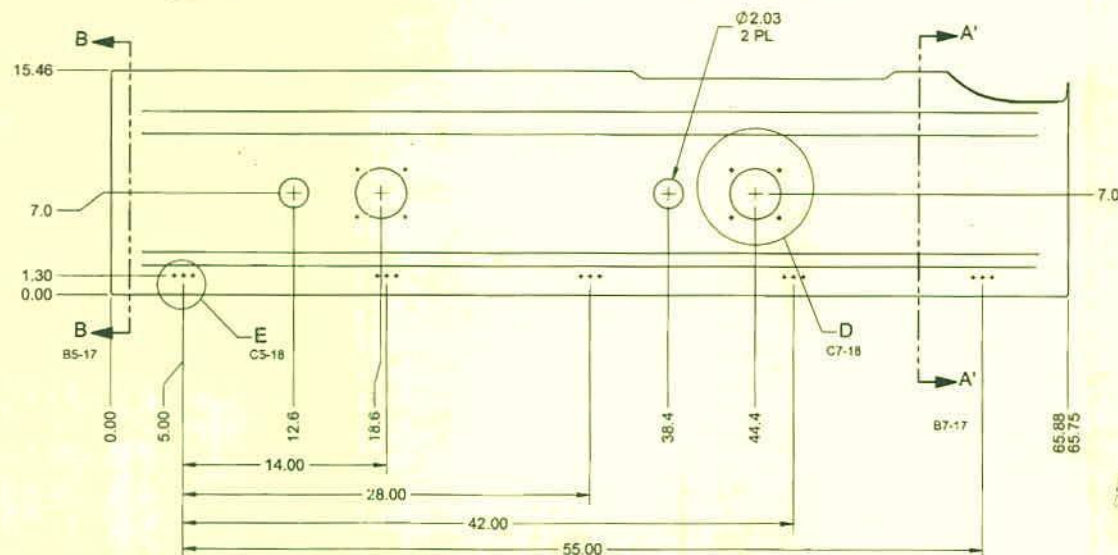
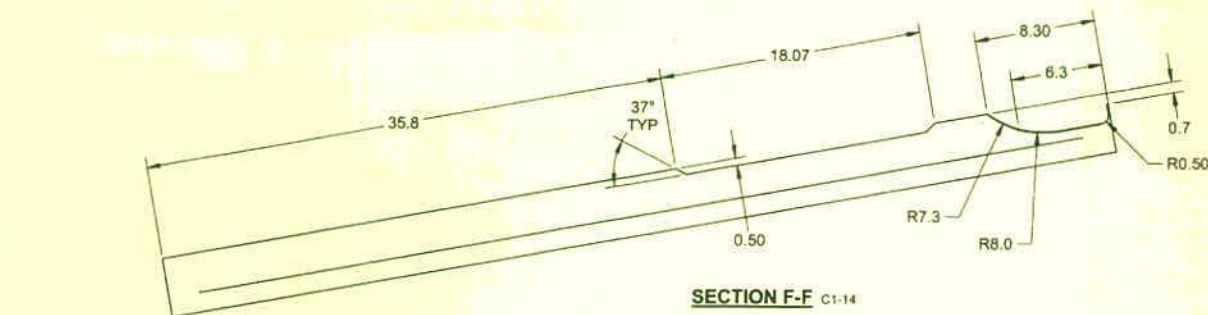
NOTES:
1) MATERIAL: F6006 SUEDE/POLISHED GY5B133 LIGHT GREY LEXAN SHEET 0.093 THICK (REF DART SPEC MLEXS.093-F6006-07)

- 2) FINISH: N/A
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 4.29 lbs
 - 8) TEXTURE ON THIS SIDE
 - 9) TRIM D4635-1 PER TOOL DT9839
 - 10) THERMOFORM D4635-1 PER QSI 022 USING DT9847 TOOL
- MIN. THICKNESS AFTER FORMING:
SHADED AREA = 0.040
RIDGES/EDGES = 0.060
ELSEWHERE = 0.070

D4635-1 LH, FWD CEILING PANEL

RELEASE
2013-12-23
ADS

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	PC	DRAWING NO.	REV. D
MFG. APPR.	PC	D4635	SHEET 13 OF 18
APPROVED	PC	TITLE	SCALE
DE APPR.	PC	OUTBOARD CEILING PANELS	NTS
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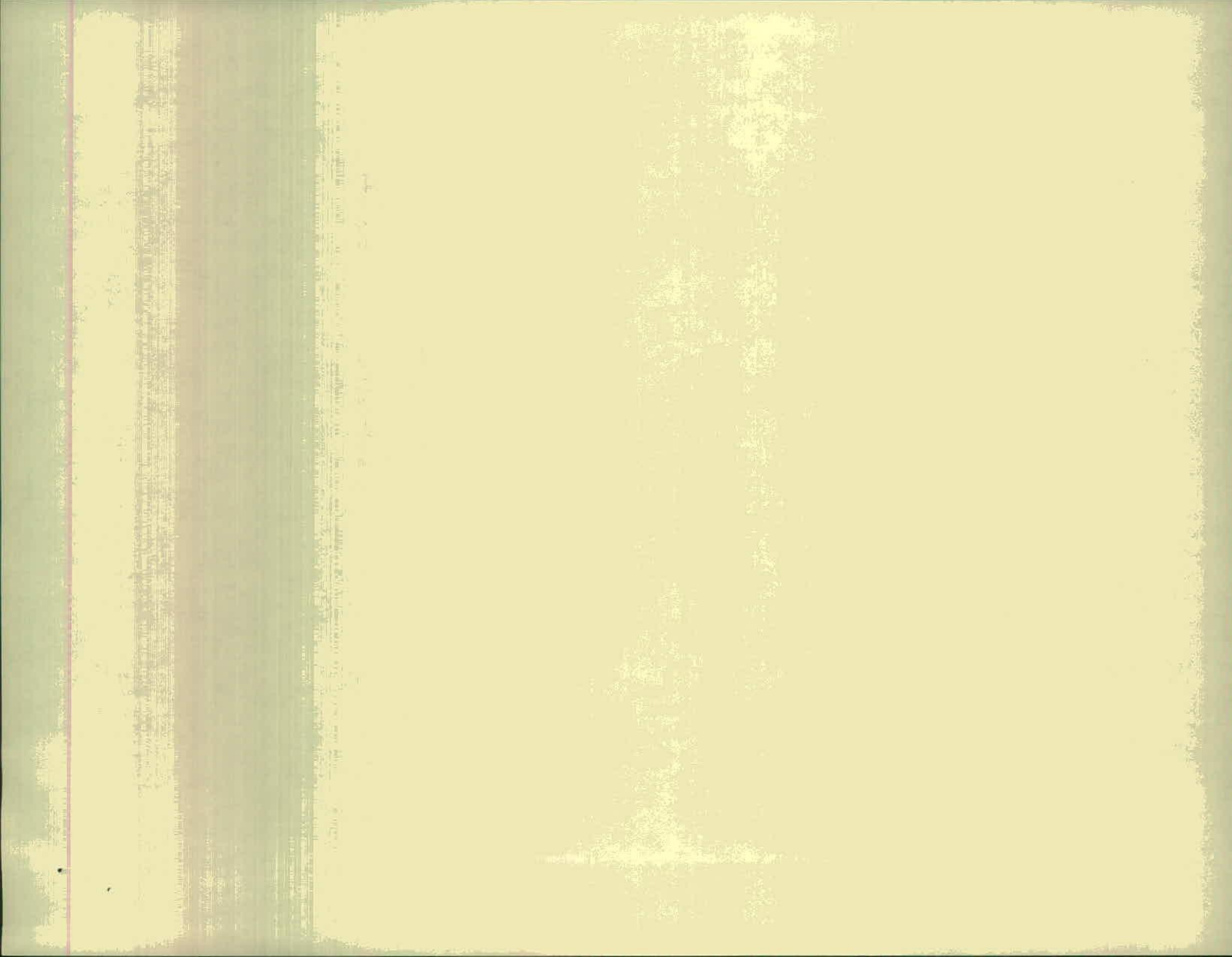
RELEASED
2013-12-23
ASS

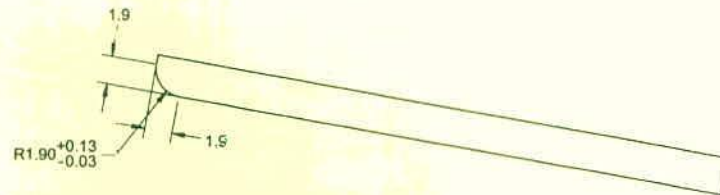
NOTES:

- 1) MATERIAL: F6006 SUEDE/POLISHED GY5B133 LIGHT GREY LEXAN SHEET 0.093 "THICK
(REF DART SPEC MLEXS.093-F6006-07)
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.305 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 4.28 lbs
- 8) TEXTURE ON THIS SIDE
- 9) TRIM D4635-2 PER TOOL DT9840
- 10) THERMOFORM D4635-2 PER QSI 022 USING DT9847 TOOL
MIN. THICKNESS AFTER FORMING:
SHADED AREA = 0.040
RIDGES/EDGES = 0.060
ELSEWHERE = 0.070

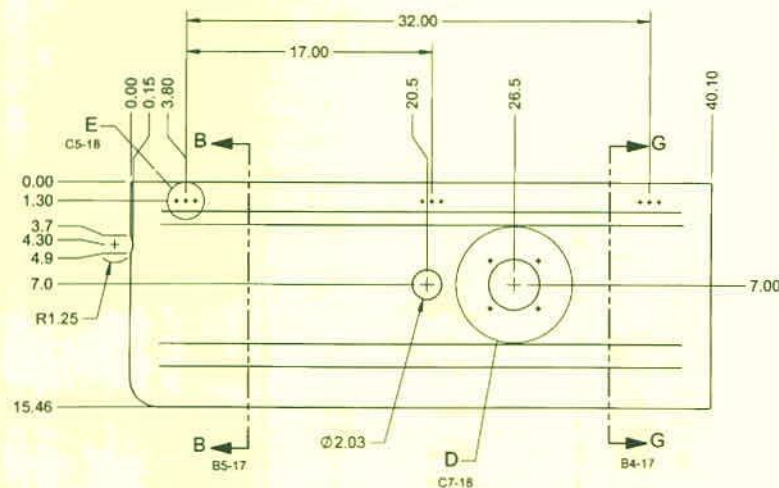
D4635-2 RH, FWD CEILING PANEL

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	PC	DRAWING NO	REV. D
MFG. APPR.	PC	D4635	SHEET 14 OF 18
APPROVED	PC	TITLE	SCALE
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SECTION H-H B2-15



D4635-3 LH, AFT CEILING PANEL

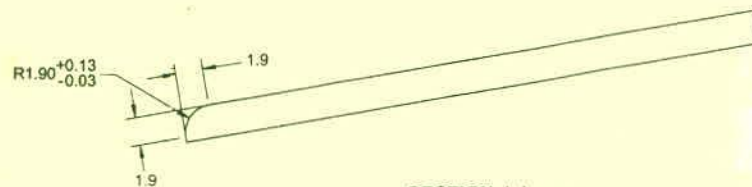
NOTES:

- 1) MATERIAL: F8006 SUEDE/POLISHED GY5B133 LIGHT GREY LEXAN SHEET 0.093 THICK
(REF DART SPEC MLEXS.093-F8006-07)
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 2.60 lbs
- 8) TEXTURE ON THIS SIDE
- 9) TRIM D4635-3 PER TOOL DT9841
- 10) THERMOFORM D4635-3 PER QSI 022 USING DT9849 TOOL
MIN. THICKNESS AFTER FORMING:
RIDGES/EDGES = 0.060
ELSEWHERE = 0.070

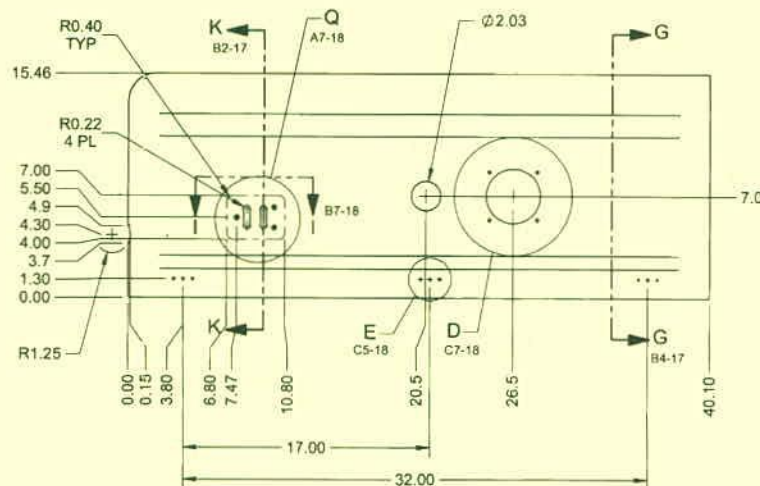


RELEASED
2013-12-23
ASS

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	PC	DRAWING NO.	REV. D
MFG. APPR.	PC	D4635	SHEET 15 OF 18
APPROVED	PC	TITLE	SCALE
DE APPR.	PC	OUTBOARD CEILING PANELS	NTS
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SECTION J-J C2-16



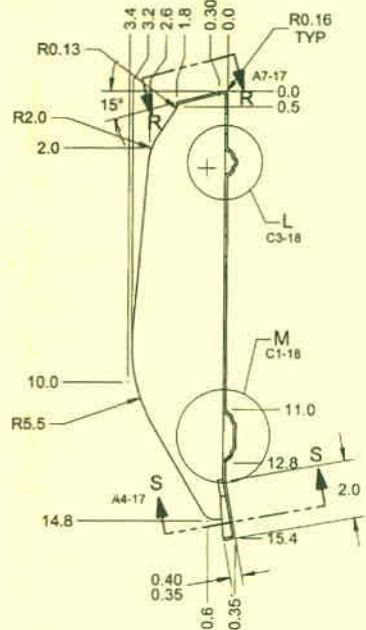
NOTES:

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(REF DART SPEC MLEXS.093-F6006-07)
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 3.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 2.60 lbs
- 8) TEXTURE ON THIS SIDE
- 9) TRIM D4635-4 PER TOOL DT9842
- 10) THERMOFORM D4635-4 PER QSI 022 USING DT9850 TOOL
MIN. THICKNESS AFTER FORMING:
RIDGES/EDGES = 0.060
ELSEWHERE = 0.070

D4635-4 RH, AFT CEILING PANEL

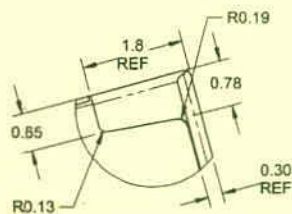
RELEASED
2013-12-23
AS

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	<i>JC</i>	DRAWING NO.	REV. D
MFG. APPR.	<i>AL</i>	D4635	SHEET 16 OF 18
APPROVED	<i>AF</i>	TITLE	SCALE
DE APPR.	<i>AF</i>	OUTBOARD CEILING PANELS	NTS
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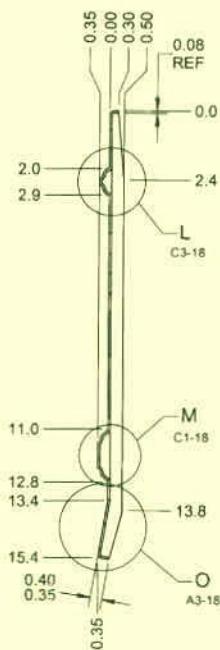
SECTION A-A
SECTION A-A' OPPOSITE
SCALE 2X

B3-13
B3-14



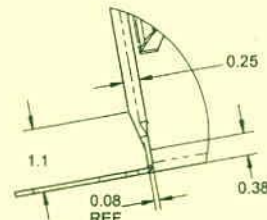
AUXILIARY VIEW R-R
SECTION R-R' OPPOSITE
SCALE 2X

D7-17



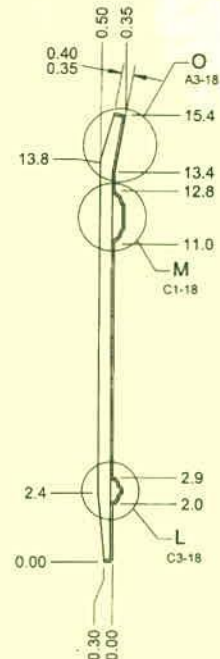
SECTION B-B
SCALE 2X

B7-13
B7-14



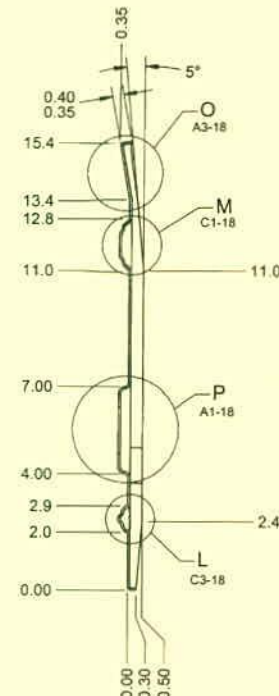
AUXILIARY VIEW S-S
SECTION S-S' OPPOSITE
SCALE 2X

B7-17



SECTION G-G
SCALE 2X

B4-15
B4-16



SECTION K-K
SCALE 2X

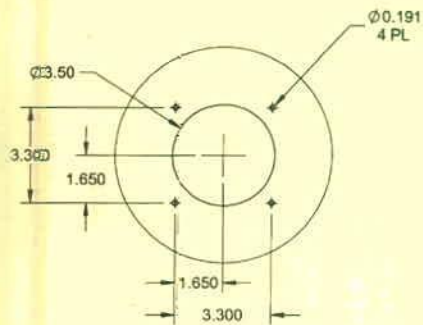
C6-16

RELEASED
2013-12-23
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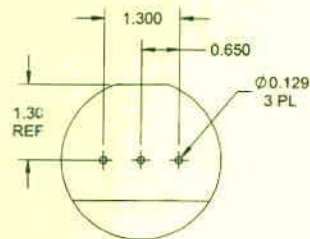
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DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	DC	DRAWING NO.	REV. D
MFG. APPR.	DC	D4635	SHEET 17 OF 18
APPROVED	DC	TITLE	SCALE
DE APPR.	DC	OUTBOARD CEILING PANELS	NTS
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8 7 6 5 4 3 2 1

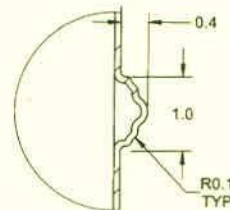
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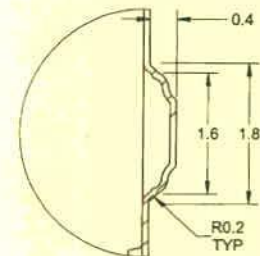
DETAIL D
SCALE 2X
B4-13
B3-14
B5-15
B5-16



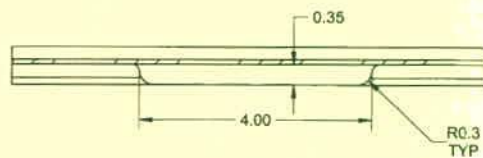
DETAIL E
SCALE 4X
C7-13
B6-14
C6-15
B5-16



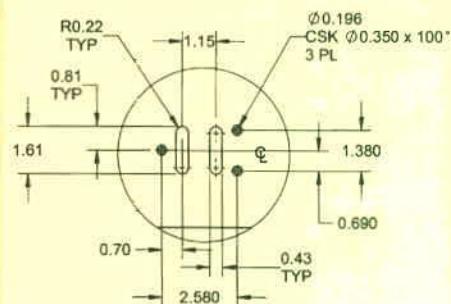
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SCALE 1.5X
B2-17
B4-17
C5-17
C7-17



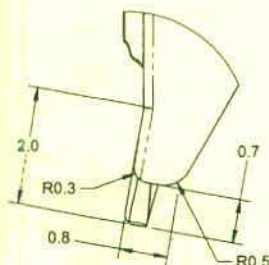
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SCALE 1.5X
C2-17
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C5-17
C7-17



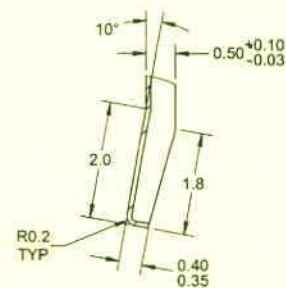
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SCALE 4X
B5-16



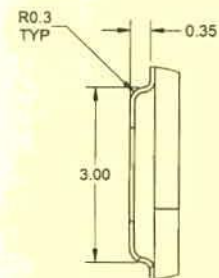
DETAIL Q
SCALE 2X
C5-16



DETAIL N
SCALE 2X
B2-13



DETAIL O
SCALE 2X
D2-17
D3-17
B5-17



DETAIL P
SCALE 4X
C2-17

B

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DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
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MFG. APPR.	AL	D4635	SHEET 18 OF 18
APPROVED	SS	TITLE	SCALE
DE APPR.	SS	OUTBOARD CEILING PANELS	NTS
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